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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,223	06/09/2006	William G. England	45038-320968 (PUR-0220)	7822
23370	7590	03/20/2009	EXAMINER	
JOHN S. PRATT, ESQ KILPATRICK STOCKTON, LLP 1100 PEACHTREE STREET ATLANTA, GA 30309			KIM, SUN U	
			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			03/20/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,223	<b>Applicant(s)</b> ENGLAND, WILLIAM G.	
	<b>Examiner</b> JOHN KIM	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 13-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/8/07</u> .   | 6) <input type="checkbox"/> Other: _____                          |

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1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-12, drawn to “a composition with a porous substrate impregnated with a permanganate”.

Group II, claims 13-21, drawn to “a method of contacting a contaminated fluid stream with a solid filtration composition”.

Group III, claims 22-33, drawn to “a method of mixing a permanganate and porous substrate”.

2. The inventions listed as Groups I and II do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features. The special feature disclosed is a porous substrate impregnated with a permanganate, wherein the concentration of permanganate salt in the composition is at least 8% by weight. This special technical feature does NOT define a contribution over the prior art, specifically, US Patent No. 6,004,522 (England ‘522)(see claims 1-2), i.e. the special technical feature is anticipated by or obvious in view of England.

2. During a telephone conversation between examiner Marjorie Christian and Christopher Durkee on 3/13/2009, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-33 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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3. Examiner Kim is now handling instant application and claims 1-12 are examined as follows.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 3,957,059 (Rainer et al).

Regarding claims 1-2, 7 and 9, Rainer et al disclose a novel composition of activated alumina impregnated with sodium permanganate having at least 8% permanganate salt by weight e.g. 12% (see col. 1, lines 1-18; col. 5, line 65 – col. 6, line 14).

6. Claims 1-2 and 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by England ‘522.

Regarding claims 1-2 and 7, England ‘522 discloses a solid filtration composition impregnated with a permanganate salt e.g. sodium permanganate having at least 8% permanganate salt by weight (see col. 6, lines 1-15; col. 7, line 32 – col. 8, line 31).

Regarding claim 6, England ‘522 discloses the composition further comprising water between approximately 20 and 25 % by weight (see col. 8, lines 18-20).

Regarding claims 8 and 12, England ‘522 discloses the composition further comprising sodium bicarbonate between 15 and 20 % by weight of the composition (see col. 8, lines 24-26).

Regarding claims 9-10, England ‘522 discloses the composition comprising a porous substrate comprising activated alumina, silica gel, zeolite, etc. (see col. 6, lines 1-4).

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Regarding claim 11, England '522 discloses the composition further comprising sodium bicarbonate and porous substrate comprising activated alumina (see col. 8, lines 12-31).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over England '522 as applied to claim 1 above, and further in view of US Patent No. 5,942,323 (England '323).

England '522 discloses a solid filtration composition as described above.

Claims 3-5 essentially differ from the composition of England '522 in reciting a percentage of permanganate salt by weight greater than 12%.

England '323 teaches a solid filtration composition impregnated with a permanganate salt wherein the percentage of permanganate salt by weight is between approximately 1 and 20% (see col. 7, lines 50-65, particularly lines 58-60). England '323 further teaches that permanganate provides controls the oxidizing reaction to destroy odors adsorbed by activated alumina (see col. 8, lines 22-34) and the higher concentration of permanganate salt at the surface of the activated alumina is believed to provide higher capacity and efficiency of alumina (see col. 14, lines 47-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the percentage of permanganate salt by weight to provide desired capacity and efficiency of alumina, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 3,226,332 teaches a potassium permanganate activated alumina.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN KIM whose telephone number is (571)272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on 571-272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Kim/  
Primary Examiner, Art Unit 1797

JK  
3/16/09